SEQUENCE LISTING

<110> E. I. du Pont de Nemours and Company

<120> Plant Viral Movement Protein Genes

<130> BB1344

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<150> 60/128,092
<151> 1999-04-07

<160> 56

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<212> DNA
<213> Vitis sp.

<220>
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<222> (445)

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<211> 130
<212> PRT
<213> Vitis sp.

<220>
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<222> (129)

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Glu Asn Thr Asp Phe Leu Cys Asn Met Asp Pro Tyr Val Val Leu Thr
20 25 30

Cys Arg Thr Gln Glu Gln Lys Ser Ser Val Ala Ser Gly Lys Gly Ser
35 40 45

Asp Pro Glu Trp Asn Glu His Phe Val Phe Thr Ile Ser Glu Gly Ile
50 55 60

Ser Glu Leu Thr Ile Lys Ile Met Asp Ser Asp Ser Gly Ser Gly Asp

65 70 75 80

Asp Phe Val Gly Glu Ala Thr Ile Pro Leu Glu Ala Leu Phe Thr Glu
85 90 95

Gly Ser Leu Glu Pro Ser Thr Gly Thr Met Leu Leu Lys Thr Lys Glu
100 105 110

Tyr Cys Gly Glu Ile Lys Val Gly Leu Thr Phe Thr Gln Lys Gly Lys
115 120 125

Xaa Asp
130

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<211> 916
<212> DNA
<213> Zea mays

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ggcgagttgg gttgggtcta tctcgcaatc gaggcgtttt ttttctgctt cgtaagttcg 180
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<211> 129
<212> PRT
<213> Zea mays

<400> 4
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1 5 10 15

Glu Asn Thr Asp Tyr Leu Ser Asn Met Asp Pro Tyr Ala Leu Leu Gln
20 25 30

Cys Arg Ser His Glu Gln Lys Ser Ser Val Ala Ser Gly Lys Gly Cys
35 40 45

Glu Pro Glu Trp Asn Glu Thr Phe Val Phe Thr Val Ser Asp Gly Ala
50 55 60

Ala Glu Leu Phe Ile Lys Leu Leu Asp Ser Asp Gly Gly Thr Asp Asp
65 70 75 80

Asp Phe Val Gly Glu Ala Thr Ile Pro Leu Glu Ala Val Tyr Thr Glu
85 90 95

Gly Asn Ile Pro Pro Thr Val Tyr Asn Val Val Lys Asp Glu Glu Tyr
100 105 110

Arg Gly Glu Ile Lys Val Gly Leu Thr Phe Thr Pro Glu Asp Gln Gly
115 120 125

Phe

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<211> 876
<212> DNA
<213> Zea mays

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gaacaccgat tacctctgta acatggatcc gtatgcaatt ctcaagtgcc gttcacagga 180
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tccatattgc tctatatccc gtattggaaa ttctaaggcc gtttgtgatt actgcttaca 720
acaagaagtt ttgcttctag ttcccactac gctttttttt gaagttttga gtggaacatc 780
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<211> 143
<212> PRT
<213> Zea mays

<400> 6
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1 5 10 15

Glu Asn Thr Asp Tyr Leu Cys Asn Met Asp Pro Tyr Ala Ile Leu Lys
20 25 30

Cys Arg Ser Gln Glu Gln Lys Ser Ser Ile Ala Thr Gly Lys Gly Thr
35 40 45

Thr Pro Glu Trp Asn Glu Asn Phe Ile Phe Thr Val Ser Asp Arg Thr
50 55 60

Thr Asp Leu Val Ile Lys Leu Met Asp Ser Asp Thr Gly Thr Ala Asp
65 70 75 80

Asp Phe Val Gly Glu Ala Thr Ile Pro Leu Glu Ala Val Tyr Thr Glu
85 90 95

Arg Ser Ile Pro Pro Thr Leu Tyr Asn Val Val Lys Gly Glu Lys Tyr
100 105 110

Cys Gly Glu Ile Lys Val Gly Leu Thr Phe Thr Pro Glu Asp Thr Arg

115 120 125

Gln Arg Gly Leu Pro Glu Asp Phe Gly Gly Trp Lys Gln Ser Ser
130 135 140

<210> 7
<211> 771
<212> DNA
<213> Hevea brasiliensis

<220>
<221> unsure
<222> (671)

<220>
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<220>
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ttaagtcttt tctttttcgc tttttggatt caattctggt ccaaaaatgc ctctaggaac 180
tgttgaagtc ctacttgttg gtgctaaggg tcttgaaaac actgattttc tcaatggcgt 240
ggacccttat gtcgtcctcg cttgccgtac ccaggagcag aaaagcagtg ttgcttcagg 300
gaaagggagt gaaccagaat ggaatgagaa attctcattt gaggtatcag atggtgacac 360
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<210> 8
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<212> PRT
<213> Hevea brasiliensis

<400> 8
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Glu Asn Thr Asp Phe Leu Asn Gly Val Asp Pro Tyr Val Val Leu Ala
20 25 30

Cys Arg Thr Gln Glu Gln Lys Ser Ser Val Ala Ser Gly Lys Gly Ser
35 40 45

Glu Pro Glu Trp Asn Glu Lys Phe Ser Phe Glu Val Ser Asp Gly Asp
50 55 60

Thr Glu Leu Thr Leu Lys Ile Met Asp Ser Asp Val Gly Ala Ala Asp
65 70 75 80

Asp Phe Val Gly Glu Ala Thr Ile Pro Leu Glu Pro Leu Phe Leu Glu
85 90 95

Gly Asn Leu Pro Ser Thr Ala Tyr Lys Val Val Lys Glu Gln Glu Tyr
100 105 110

Lys Gly Glu Ile Thr Val Gly Leu Thr Phe Thr Pro Glu Val Glu Met
115 120 125

Asp Asn Val Gly Val Asp Gly Tyr Asp Phe Arg Leu
130 135 140

<210> 9
<211> 874
<212> DNA
<213> Triticum aestivum

<400> 9
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catataattc ctgatcgagc gagcgggaga ggaaggcgag atcaggccgg gagagaagat 180
ggcgcagggg acgctggagg tgctgctcgt gggagccaag ggcctcgaga acaccgacta 240
cctctgcaac atggacccgt acgcggttct aaaatgcacc tcgcaggagc aaaagagcac 300
cgtcgcctct ggaaagggaa gtgatcctga gtggaacgaa acctttgtgt tcaccgtctc 360
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cagcgttggt gaagcaacga tcccattgga tggagtgtac actgaaggaa gcatcccacc 480
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tggataagct acgaatctac ttattgattg gtatcgtttt ctaatattca aatttgtaat 780
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<210> 10
<211> 144
<212> PRT
<213> Triticum aestivum

<400> 10
Met Ala Gln Gly Thr Leu Glu Val Leu Leu Val Gly Ala Lys Gly Leu
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Glu Asn Thr Asp Tyr Leu Cys Asn Met Asp Pro Tyr Ala Val Leu Lys
20 25 30

Cys Thr Ser Gln Glu Gln Lys Ser Thr Val Ala Ser Gly Lys Gly Ser
35 40 45

Asp Pro Glu Trp Asn Glu Thr Phe Val Phe Thr Val Ser Glu Asn Ala
50 55 60

Thr Glu Leu Val Ile Lys Leu Leu Asp Ser Asp Gly Gly Thr Asp Asp
65 70 75 80

Asp Ser Val Gly Glu Ala Thr Ile Pro Leu Asp Gly Val Tyr Thr Glu
85 90 95

Gly Ser Ile Pro Pro Thr Val Tyr Asn Val Val Lys Asp Glu Glu Tyr
100 105 110

Arg Gly Glu Ile Lys Ile Gly Leu Thr Phe Thr Pro Glu Glu Ala Arg
115 120 125

Asp Gln Asp Gln Pro Glu Glu Asn Tyr Gly Gly Trp Asn Gln Ser Ser
130 135 140

<210> 11
<211> 1482
<212> DNA
<213> Oryza sativa

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tgagatgctc aataaatttg ctttgtacta aaaaaaaaaa aa 1482

<210> 12
<211> 308
<212> PRT
<213> Oryza sativa

<400> 12

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Lys Leu Arg Asp Thr Glu Phe Phe Thr Arg Gln Asp Pro Tyr Val Cys
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Ile Glu Tyr Ala Thr Asn Lys Phe Arg Thr Arg Thr Cys Thr Asp Gly
         35                  40                  45

Gly Arg Asn Pro Thr Phe Asp Glu Lys Phe His Ile Pro Leu Ile Glu
     50                  55                  60

Gly Leu Arg Glu Leu Thr Val Thr Val Trp Asn Ser Asn Thr Leu Thr
 65                  70                  75                  80

His Asp Asp Phe Ile Gly Asn Gly Arg Val Gln Leu His Lys Val Leu
                 85                  90                  95

Thr Arg Gly Tyr Asp Asp Ala Ser Trp Pro Leu Gln Thr Arg His Met
            100                 105                 110

Arg Ser Ala Gly Glu Val Thr Leu Ile Met His Phe Asp Val Ser Ala
        115                 120                 125

Met Lys Asn Lys Pro Gly Lys Ile Ser Ala Ala Ser Thr Thr His Ser
    130                 135                 140

Val Leu Pro Val Pro Val Pro Ala Val Pro Tyr Ala Ala Pro Ser Pro
145                 150                 155                 160

Ser Tyr Ala Leu Pro Pro Ala Gly Tyr Pro Ala Val Pro Pro Tyr Gln
                165                 170                 175

Ser Tyr Pro Ala Ser His Val Pro Ala Pro Tyr Pro Thr Ser Ala Tyr
            180                 185                 190

Pro His Pro Pro Pro Ser Leu Leu Ala Arg Asp Val Glu His Ala Ala
        195                 200                 205

Tyr Pro Pro Thr Ser Thr Thr Tyr Pro Pro Gln Pro Tyr Pro Pro Gln
    210                 215                 220

Pro Gln Gly Gln Thr Tyr Pro Pro Gln Pro Gln Gly Glu Thr Tyr Gln
225                 230                 235                 240

Pro Gln Pro Gln Arg Glu Thr Tyr Pro Pro Gln Pro Gln Val Gln Pro
                245                 250                 255

Tyr Pro Pro Lys Pro Gln Gly Gln Pro Tyr Pro Pro Gln Pro Gln Gly
            260                 265                 270

Gln Pro Tyr Pro Pro Gln Pro Tyr Gly Gln Thr Tyr Pro Pro Pro Pro
        275                 280                 285

Lys Gly Gln Pro Thr Tyr Pro Pro Ala Pro Tyr Pro Ser Thr Tyr Pro
    290                 295                 300
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Pro Ala Pro Tyr
305

<210> 13
<211> 1172
<212> DNA
<213> Glycine max

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ggttacggtg gtttcgtgct ccaagttgaa ggacacagaa tggatttcaa gacaagatcc 180
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<210> 14
<211> 258
<212> PRT
<213> Glycine max

<400> 14
Met Ser Ser Ile Thr Gly Ile Gln Gly Gln Pro Leu Glu Val Thr Val
1 5 10 15

Val Ser Cys Ser Lys Leu Lys Asp Thr Glu Trp Ile Ser Arg Gln Asp
20 25 30

Pro Tyr Val Cys Val Glu Tyr Gly Ser Thr Lys Phe Arg Thr Arg Thr
35 40 45

Cys Thr Asp Gly Gly Lys Asn Pro Val Phe Gln Glu Lys Phe Ile Phe
50 55 60

Pro Leu Ile Glu Gly Leu Arg Glu Leu Asn Val Leu Val Trp Asn Ser
65 70 75 80

Asn Thr Leu Thr Phe Asp Asp Phe Ile Gly Ser Gly Lys Ile Gln Leu
85 90 95

His Lys Val Leu Ser Gln Gly Phe Asp Asp Ser Ala Trp Pro Leu Gln
100 105 110

Thr Lys Thr Gly Arg Tyr Ala Gly Glu Val Lys Val Ile Leu His Tyr
115 120 125

Ala Ile Ala Asn Gln Arg His Lys Leu Val Ser Gly His Ala Pro Ser
130 135 140

Ala Pro Pro Tyr Val Ala Thr Ala Thr Pro Pro Val Pro Ser Ser Tyr
145 150 155 160

Ser Thr Ser Tyr Pro Pro Pro Pro Ser Ala Thr Ser Tyr Pro Pro Pro
165 170 175

Pro Ser Pro Pro Ser Ala Thr Pro Tyr His Thr Thr Gly Ser Tyr Ser
180 185 190

Tyr Pro Pro Pro Pro Pro Pro Pro Thr Ala Tyr Pro Pro Tyr Ser Ser
195 200 205

His Ser Ser Pro Tyr Pro Pro Ser Ser Tyr Pro Pro Gln Pro Ser Ser
210 215 220

Tyr Pro Pro Pro Pro Pro Pro Ser Ser Tyr Pro Pro Ala Ser Ala Tyr
225 230 235 240

Pro Tyr Pro Pro Pro Ala Gly Tyr Pro Ser Gly Ile Tyr Pro Pro Pro
245 250 255

Pro Tyr

<210> 15
<211> 757
<212> DNA
<213> Zea mays

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agggcgtcct gaaggtgcac ctcgtcgacg ccaaggggct ctccggcaac gatttcttag 180
ggaagctgga cccctacgtg atcatgcagt accggagcca ggagcgcaag agcagcgtcg 240
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accacggcga gatcaaggtc gccatcacct tcacctccac ccagacccag gttcaggaag 540
atggaggagc aattggagga tggaggcaca gtagctttaa tcagtgaaag tgataggcgt 600
cgtggactct ctcaagttct ttggttgctt ggtggtgttt cgggttggat gtagtttttg 660
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aaccaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaag 757

<210> 16
<211> 157
<212> PRT
<213> Zea mays

<400> 16
Met Gly Lys Gly Val Leu Lys Val His Leu Val Asp Ala Lys Gly Leu
1 5 10 15

Ser Gly Asn Asp Phe Leu Gly Lys Leu Asp Pro Tyr Val Ile Met Gln
20 25 30

Tyr Arg Ser Gln Glu Arg Lys Ser Ser Val Ala Arg Asp Gln Gly Arg
35 40 45

Asn Pro Cys Trp Asn Glu Val Phe Lys Phe Gln Ile Asn Ser Ala Ala
50 55 60

Ala Asn Val Gln His Lys Leu Ile Leu Arg Ile Met Asp His Asp Asn
65 70 75 80

Phe Ser Ser Asp Asp Phe Leu Gly Glu Ala Thr Ile Asp Val Thr Asp
85 90 95

Ile Val Ser Leu Gly Ala Glu Arg Gly Thr Tyr His Leu Asn Ala Ala
100 105 110

Lys His Asn Val Val Leu Ala Asp Lys Thr Tyr His Gly Glu Ile Lys
115 120 125

Val Ala Ile Thr Phe Thr Ser Thr Gln Thr Gln Val Gln Glu Asp Gly
130 135 140

Gly Ala Ile Gly Gly Trp Arg His Ser Ser Phe Asn Gln
145 150 155

<210> 17
<211> 422
<212> DNA
<213> Hevea brasiliensis

<220>
<221> unsure
<222> (410)

<220>
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<400> 17
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ctgggctatt ggaagtgcag ctggtgaatg caaaaggcct cagaggcact gatttcttag 180
gtaagattga tccatatgtt atcgtgaagt acaaaaacca agagcgcgag agcagtgtcg 240
ccagaggtca aggtgggaat ccagtgtgga atgagaaact cacattcaag gtggaatatc 300
cagggcaagg tgaagagtac aagctcattt taaaaatcat ggacaaggac accttctctg 360
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<210> 18
<211> 102
<212> PRT
<213> Hevea brasiliensis

<220>
<221> UNSURE
<222> (99)

<220>
<221> UNSURE
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Met Ala Thr Gly Leu Leu Glu Val Gln Leu Val Asn Ala Lys Gly Leu
1 5 10 15

Arg Gly Thr Asp Phe Leu Gly Lys Ile Asp Pro Tyr Val Ile Val Lys
20 25 30

Tyr Lys Asn Gln Glu Arg Glu Ser Ser Val Ala Arg Gly Gln Gly Gly
35 40 45

Asn Pro Val Trp Asn Glu Lys Leu Thr Phe Lys Val Glu Tyr Pro Gly
50 55 60

Gln Gly Glu Glu Tyr Lys Leu Ile Leu Lys Ile Met Asp Lys Asp Thr
65 70 75 80

Phe Ser Ala Asp Asp Leu Leu Gly His Ala Thr Ile Tyr Val Lys Asp
85 90 95

Leu Leu Xaa Leu Xaa Met
100

<210> 19
<211> 486
<212> DNA
<213> Glycine max

<220>
<221> unsure
<222> (430)

<220>
<221> unsure
<222> (464)

<220>
<221> unsure
<222> (486)

<400> 19
agaagaatag aatcttcaga gacatggcaa ttgggttcat ggaggtgcag cttgtgaaag 60
caaaaggcct gcgagacact gatatctttg gtaaaatgga tccctatgtt ctgatacaat 120
acaaaggcca agagaagagg agtggtgtcg ctaatggcaa aggcaaaaat ccggtatgga 180
atgagaaatt tatcttcaaa gtagaatatc ctggatcaag caatcaacac aagctcatcc 240
tcaaaattat ggataaagac ttatatacag acgacttcgt cggagaagca ataatccatg 300
taggggattt attggcccaa ggagtagaga acggaggagc caaattacag actctcaagt 360
atagagtggt tcgtgctaac aagtcttatt gtggtgaaat tgatgttggg tgttacttttt 420
accccgaaan gtgggaagac aaattttgtg ggaagaagac atangaggat ggaaaagaaa 480
gtgacn 486

<210> 20
<211> 154
<212> PRT
<213> Glycine max

<220>
<221> UNSURE
<222> (136)

<220>
<221> UNSURE
<222> (147)

<400> 20
Met Ala Ile Gly Phe Met Glu Val Gln Leu Val Lys Ala Lys Gly Leu
1 5 10 15

Arg Asp Thr Asp Ile Phe Gly Lys Met Asp Pro Tyr Val Leu Ile Gln
20 25 30

Tyr Lys Gly Gln Glu Lys Arg Ser Gly Val Ala Asn Gly Lys Gly Lys
35 40 45

Asn Pro Val Trp Asn Glu Lys Phe Ile Phe Lys Val Glu Tyr Pro Gly
50 55 60

Ser Ser Asn Gln His Lys Leu Ile Leu Lys Ile Met Asp Lys Asp Leu
65 70 75 80

Tyr Thr Asp Asp Phe Val Gly Glu Ala Ile Ile His Val Gly Asp Leu
85 90 95

Leu Ala Gln Gly Val Glu Asn Gly Gly Ala Lys Leu Gln Thr Leu Lys
100 105 110

Tyr Arg Val Val Arg Ala Asn Lys Ser Tyr Cys Gly Glu Ile Asp Val
115 120 125

Gly Cys Tyr Phe Tyr Pro Glu Xaa Trp Glu Asp Lys Phe Cys Gly Lys
130 135 140

Lys Thr Xaa Glu Asp Gly Lys Glu Ser Asp
145 150

<210> 21
<211> 862
<212> DNA
<213> Glycine max

<400> 21
ttattagaca ttaaattgta agaattttgc tgacttgtaa gcttcagaga cgaagacaca 60
cggttagagt gagaaagaga tggcaattgg gttcatggag gtgcagcttg tgaaagcaaa 120
ggagttgtgt gacactgatt tctttggtag tatggacccg tatgttgtga tacaatacaa 180
cggccaagag caaaggagta gtgttgctaa gggacagggc aataatccgg tatggaatga 240
gaaatttgtg ttcaaggtag aatatcctac actgagtaat tcatacaaga ttatcttaaa 300
aatcatggac aaggatcttt tatctgcaga tgactttgtt ggtcaagcca tagtctatgt 360
ggaagattta ttagccatag gggtagagga tggtgcggct gagctacaac ctctaaagta 420
cagagtaatt cgtgcagatc aatcttattg tggagaaatt gatcttggta taacttttaa 480
ggtggaagaa gagttcaatg gagaagctaa acgaggatcg aaggacagta aatagtattt 540
gcaatagcag ttggccaaca tgaatatcaa ttgatttcaa tggagatttt ggaatcatca 600
tcatgtagtt agtttcatct ttttagttgt atatgatcct tttggaaagt aggatcaatg 660
catagataaa tttactaaat tttatgccat caaattagta atagtatgca ttattaatct 720
tctaatttat cttcaccata attaatctca ttgatgattc aatcttgtac ttccttaaca 780
tctatatact atatgggttt gaacctttaa aaaaaaagaa aaaaaaaaaa aaaaaaaaaa 840
aaaaaaaaaa aaaaaaaaaa aa 862

<210> 22
<211> 151

<212> PRT
<213> Glycine max

<400> 22
Met Ala Ile Gly Phe Met Glu Val Gln Leu Val Lys Ala Lys Glu Leu
1 5 10 15

Cys Asp Thr Asp Phe Phe Gly Ser Met Asp Pro Tyr Val Val Ile Gln
20 25 30

Tyr Asn Gly Gln Glu Gln Arg Ser Ser Val Ala Lys Gly Gln Gly Asn
35 40 45

Asn Pro Val Trp Asn Glu Lys Phe Val Phe Lys Val Glu Tyr Pro Thr
50 55 60

Leu Ser Asn Ser Tyr Lys Ile Ile Leu Lys Ile Met Asp Lys Asp Leu
65 70 75 80

Leu Ser Ala Asp Asp Phe Val Gly Gln Ala Ile Val Tyr Val Glu Asp
85 90 95

Leu Leu Ala Ile Gly Val Glu Asp Gly Ala Ala Glu Leu Gln Pro Leu
100 105 110

Lys Tyr Arg Val Ile Arg Ala Asp Gln Ser Tyr Cys Gly Glu Ile Asp
115 120 125

Leu Gly Ile Thr Phe Lys Val Glu Glu Glu Phe Asn Gly Glu Ala Lys
130 135 140

Arg Gly Ser Lys Asp Ser Lys
145 150

<210> 23
<211> 860
<212> DNA
<213> Triticum aestivum

<400> 23
tccaaacgcg acctcatcag agcaagaccc ggaggaaaca aggagaggcc agagcggcct 60
gtcacaaggc aaaggacaga ggaggtgctt gttcaggtct cctgctagat ccggaggcga 120
tgggcagggg cgtgctggag gtgcatctcg tcgacgccaa gggcctcttc ggcagcgatt 180
tcctagggaa gatcgacccg tatgtaatcg tgcaataccg gagccaggag cgcaagagca 240
gcacctccag agatgagggg aggaacccga gctggaacga ggtgttccgg ttccagatca 300
actcctctgc ggccaacggg cagcacaagc tcttcctccg gatcatggac cacgacaact 360
tctccagcga cgacttcctc ggccaagcga cgatcaacgt gaccgatctg atcagcaccg 420
gcatggagag cggcgcgtcg cagctgaacg cggcaaagta cagcgttgtg tccgctgata 480
actcatacca cggcgagatc agagtaggcc tcacgttcac cgccaccaag gttgaagaag 540
acggagggca ggtcggaggc tggacgcaca gctctcgcga gtagagcatg taacgtcctt 600
gcccttcgct cgtagcttta gtgttggatg ctatgatgtc cgtgactgaa tgatgtgatt 660
ccaagtgtat gtacgttgca cctgtagtag ctttttagaa gatgtatatg tactagtagc 720
cagaagtcag aactcgtagc aggctagagg cgtcaattcc gttaattaat tgtcgatttg 780
tggttcttat tttaggggga attgtgattc tggatgcgaa caccaaaaaa aaaaaaaaaa 840
aaaaaaaaaa aaaaaaaaaa 860

<210> 24
<211> 154
<212> PRT
<213> Triticum aestivum

<400> 24
Met Gly Arg Gly Val Leu Glu Val His Leu Val Asp Ala Lys Gly Leu
1 5 10 15

Phe Gly Ser Asp Phe Leu Gly Lys Ile Asp Pro Tyr Val Ile Val Gln
20 25 30

Tyr Arg Ser Gln Glu Arg Lys Ser Ser Thr Ser Arg Asp Glu Gly Arg
35 40 45

Asn Pro Ser Trp Asn Glu Val Phe Arg Phe Gln Ile Asn Ser Ser Ala
50 55 60

Ala Asn Gly Gln His Lys Leu Phe Leu Arg Ile Met Asp His Asp Asn
65 70 75 80

Phe Ser Ser Asp Asp Phe Leu Gly Gln Ala Thr Ile Asn Val Thr Asp
85 90 95

Leu Ile Ser Thr Gly Met Glu Ser Gly Ala Ser Gln Leu Asn Ala Ala
100 105 110

Lys Tyr Ser Val Val Ser Ala Asp Asn Ser Tyr His Gly Glu Ile Arg
115 120 125

Val Gly Leu Thr Phe Thr Ala Thr Lys Val Glu Glu Asp Gly Gly Gln
130 135 140

Val Gly Gly Trp Thr His Ser Ser Arg Glu
145 150

<210> 25
<211> 914
<212> DNA
<213> Oryza sativa

<400> 25
cttttggaag aaaagatcac ccaaaaccct atattccata gttgagacac aagatttttt 60
gaagccaagt ttgcgcatta catcaaaggg ttcttttgat gcgaccaatg ctgtgaagag 120
tgtaactagc agtatctcta gcgcttcagg gaagcatgtc gctgacgata caagagaatt 180
tgttggagag ctgaacatta cagtggtaag aggtattcag ttggccgtca gagacatgct 240
aacgagcgat ccatatgttg ttctaacact tggggagcag aaagctcaaa ccactgttaa 300
accgagtgac ttgaacccag tatggaatga ggtgcttaag atatcaattc ctcgaaatta 360
tggacctctt aaacttgaag tatacgacca tgatacgttc tctgctgatg atatcatggg 420
ggaagcggag atagatcttc aaccaatgat cacagccgtc atggcctttg gagatccctc 480
gcgtgttggt gacatgcaaa ttggaaggtg gttcatgacc aaagacaatg ccctggtgaa 540
agatagcact gtcaatgttg tgtcgggcaa ggtaaaacag gaagtgcacc taaagttgca 600
gaatgtagaa tcaggtgaga tggagttaga actggaatgg gttccaatac cctagattaa 660
taaagctcga ttggttctct gccaaaaaaa attactcaag aagcgtcagt tttgtaattt 720
aaatgaatgg cttcaaatcc cgtgtactta ctgaatctct gtcttcaaca ttttggccac 780
ccgaacgaaa ttcgtaaaaa tgccattgta aaatatcatg ttgtaatccg tcggctgcac 840
tcacgaccaa ttatattatt ctttagtgaa gtgtgctttc aacccgttgt cataaaaaaa 900
aaaaaaaaaa aaaa 914

<210> 26
<211> 217
<212> PRT
<213> Oryza sativa

<400> 26
Phe Trp Lys Lys Arg Ser Pro Lys Thr Leu Tyr Ser Ile Val Glu Thr
1 5 10 15

Gln Asp Phe Leu Lys Pro Ser Leu Arg Ile Thr Ser Lys Gly Ser Phe
20 25 30

Asp Ala Thr Asn Ala Val Lys Ser Val Thr Ser Ser Ile Ser Ser Ala
35 40 45

Ser Gly Lys His Val Ala Asp Asp Thr Arg Glu Phe Val Gly Glu Leu
50 55 60

Asn Ile Thr Val Val Arg Gly Ile Gln Leu Ala Val Arg Asp Met Leu
65 70 75 80

Thr Ser Asp Pro Tyr Val Val Leu Thr Leu Gly Glu Gln Lys Ala Gln
85 90 95

Thr Thr Val Lys Pro Ser Asp Leu Asn Pro Val Trp Asn Glu Val Leu
100 105 110

Lys Ile Ser Ile Pro Arg Asn Tyr Gly Pro Leu Lys Leu Glu Val Tyr
115 120 125

Asp His Asp Thr Phe Ser Ala Asp Asp Ile Met Gly Glu Ala Glu Ile
130 135 140

Asp Leu Gln Pro Met Ile Thr Ala Val Met Ala Phe Gly Asp Pro Ser
145 150 155 160

Arg Val Gly Asp Met Gln Ile Gly Arg Trp Phe Met Thr Lys Asp Asn
165 170 175

Ala Leu Val Lys Asp Ser Thr Val Asn Val Val Ser Gly Lys Val Lys
180 185 190

Gln Glu Val His Leu Lys Leu Gln Asn Val Glu Ser Gly Glu Met Glu
195 200 205

Leu Glu Leu Glu Trp Val Pro Ile Pro
210 215

<210> 27
<211> 770
<212> DNA
<213> Oryza sativa

<400> 27
ccacgcgtcc ggcctgtgca acatcatcat caagaagaag aagagatcaa cggcaagaag 60
actagcgact agcgagagat cgatcgaaga gaagaggaga gatggtgcac gggaagctgg 120
aggtcctcct cgtctgcgcc aagggcctcg aggacactga cttcttgaac gacatggacc 180
cctacgtgat cctcacctgc cgcactcagg agcagaaaag cagcgttgca aaaggagcag 240
gaagcgagcc tgaatggaac gagaccttcg tcttcaccgt ctccgacgat gttccacagc 300
tcaatgtcaa gatcatggac agtgatgcct tctcagctga cgatttcgtc ggtgaagcaa 360
acattcctct ggagcctgtg ttcctggaag gcagccttcc tccagccgtc caccgtgtcg 420
tcaaggagga gaagtactgt ggagagatca aggttgctct caccttcact ccagcagcgg 480
aaactcgcca tcatcacaac cacgagaacg agggggaggg ttacagcagc tggaactgat 540
tgcctgctac taatgagcat caacgagagg agatcttgtc tcaagaatta atgtgcttgt 600
caacaatact ccgtgctatg atgtcctaag aactgaaaca tccatttata tgtatatccc 660

agaccattga cttgctctgc ctaaattttg tatatttttt actacaaaga tgtgatggtg 720
tgaaatccag aatattttta tcgaaaaaaa aaaaaaaaaa aaaaaaaaag 770

<210> 28
<211> 145
<212> PRT
<213> Oryza sativa

<400> 28

Met	Val	His	Gly	Lys	Leu	Glu	Val	Leu	Leu	Val	Cys	Ala	Lys	Gly	Leu
1				5					10					15	
Glu	Asp	Thr	Asp	Phe	Leu	Asn	Asp	Met	Asp	Pro	Tyr	Val	Ile	Leu	Thr
			20					25					30		
Cys	Arg	Thr	Gln	Glu	Gln	Lys	Ser	Ser	Val	Ala	Lys	Gly	Ala	Gly	Ser
		35					40					45			
Glu	Pro	Glu	Trp	Asn	Glu	Thr	Phe	Val	Phe	Thr	Val	Ser	Asp	Asp	Val
	50					55					60				
Pro	Gln	Leu	Asn	Val	Lys	Ile	Met	Asp	Ser	Asp	Ala	Phe	Ser	Ala	Asp
65					70					75					80
Asp	Phe	Val	Gly	Glu	Ala	Asn	Ile	Pro	Leu	Glu	Pro	Val	Phe	Leu	Glu
				85					90					95	
Gly	Ser	Leu	Pro	Pro	Ala	Val	His	Arg	Val	Val	Lys	Glu	Glu	Lys	Tyr
			100					105					110		
Cys	Gly	Glu	Ile	Lys	Val	Ala	Leu	Thr	Phe	Thr	Pro	Ala	Ala	Glu	Thr
		115					120					125			
Arg	His	His	His	Asn	His	Glu	Asn	Glu	Gly	Glu	Gly	Tyr	Ser	Ser	Trp
	130					135					140				

Asn
145

<210> 29
<211> 958
<212> DNA
<213> Glycine max

<400> 29
gcacagaaag aaaaaagttg gatccagcca aattccagct ccaatttgta actcactgct 60
tcaggcattt ctggcacaat tttttccacc tttatttcaa ctttaagact ccacagaaag 120
aagcatattc ctgagtcaaa tagttctgtc catatagaat ttgtgaagtg agagtccaac 180
ctttcatttt caattttcaa agatgcctcg tggaacactt gaagttgttc tgatcagcgc 240
caaaggaatc gatgacaatg attttctctc cagcatagat ccttatgtga ttctcacata 300
cagggcacag gagaaaaaga gcactgtgca agaagatgct ggatccaagc cacaatggaa 360
tgagagcttt cttttcactg tctctgacag tgcttctgaa cttaatctga agataatgga 420
taaagacaac tttagtcaag atgattgtct tggcgaggca accattcatt tagatccagt 480
gtttgaagcc ggtagcattc cagaaactgc ttacaaggtt gtgaaggacg aagaatattg 540
tggtgagatt aaggtggctc tcactttcac tgctgagaga aatgaggagc agggttatga 600
tgcacctgaa gagagctatg gtggatggaa agaatccagt ggggaatatt aaagtgaaag 660
aagaatttac atacttcaat ggccagactt acctttataa tgaaaaataa gcagttttgg 720
tgtcactctt aggcaatttc cattattgtg ttttctggtg tgaagatcca atagtgttgt 780
gcttttaggt tgcattcctc cctttggata ttaaagtaca ttatgcttga tatattatct 840

tttatgcatc agttaaacat tagaagagca gtgctatttt atttaaaaaa aaaaaaaaaa 900
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaa 958

<210> 30
<211> 149
<212> PRT
<213> Glycine max

<400> 30
Met Pro Arg Gly Thr Leu Glu Val Val Leu Ile Ser Ala Lys Gly Ile
1 5 10 15

Asp Asp Asn Asp Phe Leu Ser Ser Ile Asp Pro Tyr Val Ile Leu Thr
20 25 30

Tyr Arg Ala Gln Glu Lys Lys Ser Thr Val Gln Glu Asp Ala Gly Ser
35 40 45

Lys Pro Gln Trp Asn Glu Ser Phe Leu Phe Thr Val Ser Asp Ser Ala
50 55 60

Ser Glu Leu Asn Leu Lys Ile Met Asp Lys Asp Asn Phe Ser Gln Asp
65 70 75 80

Asp Cys Leu Gly Glu Ala Thr Ile His Leu Asp Pro Val Phe Glu Ala
85 90 95

Gly Ser Ile Pro Glu Thr Ala Tyr Lys Val Val Lys Asp Glu Glu Tyr
100 105 110

Cys Gly Glu Ile Lys Val Ala Leu Thr Phe Thr Ala Glu Arg Asn Glu
115 120 125

Glu Gln Gly Tyr Asp Ala Pro Glu Glu Ser Tyr Gly Gly Trp Lys Glu
130 135 140

Ser Ser Gly Glu Tyr
145

<210> 31
<211> 695
<212> DNA
<213> Triticum aestivum

<400> 31
gcacgaggag agatccaaga ctaggccggc cggccggagg agatcgagaa ggaggaggag 60
acatggtgcg cgggaagctg gaggtgctgc tcgtctccgc caagggcctc gacgactccg 120
atttcttcaa tagcatggac ccgtacgtga tcctcacctg ccgcagccac gagcagaaga 180
gcaccgtcgc atcaggagca gggagcgagc ctgagtggaa cgagaccttc gtcttcgccg 240
tctccggcga cgctccggag ctcagggtca agatcatgga cagcgacgcc ctctcggccg 300
acgacctcgt cggagaagca tgtatcccgc tggaggctgt gctccaggag ggcagcctgc 360
cgccggccgt gcaccgggtc gtcaaggacg aggagtaccg cggggagatc aagatcgcgc 420
tcaccttcac cccggcagag gaaaacgagg aggaggagga gagctacggc ggctggaatc 480
agtccacctg aaaaaggcca gcgagccagc aagatggtgc tgtatgtctg actgtcataa 540
tggatagaaa ggctttggat atccttgatg tgtgtgacag acagggcatt caggaaaacg 600
agtaaaaata ggggaaatat gtatcgatgc atgcatgaag tactaatcaa gcaattcacc 660
gcatcgtttt gtattgcaaa aaaaaaaaaa aaaaa 695

<210> 32
<211> 142

<212> PRT
<213> Triticum aestivum

<400> 32
Met Val Arg Gly Lys Leu Glu Val Leu Leu Val Ser Ala Lys Gly Leu
1 5 10 15

Asp Asp Ser Asp Phe Phe Asn Ser Met Asp Pro Tyr Val Ile Leu Thr
20 25 30

Cys Arg Ser His Glu Gln Lys Ser Thr Val Ala Ser Gly Ala Gly Ser
35 40 45

Glu Pro Glu Trp Asn Glu Thr Phe Val Phe Ala Val Ser Gly Asp Ala
50 55 60

Pro Glu Leu Arg Val Lys Ile Met Asp Ser Asp Ala Leu Ser Ala Asp
65 70 75 80

Asp Leu Val Gly Glu Ala Cys Ile Pro Leu Glu Ala Val Leu Gln Glu
85 90 95

Gly Ser Leu Pro Pro Ala Val His Arg Val Val Lys Asp Glu Glu Tyr
100 105 110

Arg Gly Glu Ile Lys Ile Ala Leu Thr Phe Thr Pro Ala Glu Glu Asn
115 120 125

Glu Glu Glu Glu Glu Ser Tyr Gly Gly Trp Asn Gln Ser Thr
130 135 140

<210> 33
<211> 617
<212> DNA
<213> Zea mays

<220>
<221> unsure
<222> (421)

<400> 33
cacgccgcct ccatgtgggt ggggaggcaa acgcgttcgt ccatctctga aactcaaacg 60
ccttgtattg gagcatacta caggagtact tctgtacaaa tataaatacc cctggcgagt 120
tgggttgggt ctatctcgca atcgaggcgt ttttttttctg cttcgtaagt tcgtggtcga 180
tccagcgagc gagcgagcag accggcggcc aaccgcggag ggagagatgg cgcaggggac 240
gctggaggtg cttctcgtcg gagccagggg cctcgagaac accgattacc tgagcaacat 300
ggacccctac gcgcttctgc aatgtcgctc ccacgagcag aagagcagcg tcgcatctgg 360
caaaggctgt gaacctgagt ggaacgagac cttcgtgttc accgtctcca acggcgcaca 420
ngagctgttc atcaagctcc tggacagtga cggtggcact gatgacgatt ttgttggtga 480
agcaacgatt cctctggaag ccagtttaca cgggaaggaa gcattccttc cgactgttta 540
caatgttgtg aaagacgaag aataccgcgg agaaatcaaa gttggcctca cgttcactcc 600
agaggtaaac catctca 617

<210> 34
<211> 202
<212> PRT
<213> Zea mays

<220>
<221> UNSURE
<222> (140)

<400> 34
Thr Pro Pro Pro Cys Gly Trp Gly Gly Lys Arg Val Arg Pro Ser Leu
1 5 10 15

Lys Leu Lys Arg Leu Val Leu Glu His Thr Thr Gly Val Leu Leu Tyr
20 25 30

Lys Tyr Lys Tyr Pro Trp Arg Val Gly Leu Gly Leu Ser Arg Asn Arg
35 40 45

Gly Val Phe Phe Leu Leu Arg Lys Phe Val Val Asp Pro Ala Ser Glu
50 55 60

Arg Ala Asp Arg Arg Pro Thr Ala Glu Gly Glu Met Ala Gln Gly Thr
65 70 75 80

Leu Glu Val Leu Leu Val Gly Ala Arg Gly Leu Glu Asn Thr Asp Tyr
85 90 95

Leu Ser Asn Met Asp Pro Tyr Ala Leu Leu Gln Cys Arg Ser His Glu
100 105 110

Gln Lys Ser Ser Val Ala Ser Gly Lys Gly Cys Glu Pro Glu Trp Asn
115 120 125

Glu Thr Phe Val Phe Thr Val Ser Asn Gly Ala Xaa Glu Leu Phe Ile
130 135 140

Lys Leu Leu Asp Ser Asp Gly Gly Thr Asp Asp Asp Phe Val Gly Glu
145 150 155 160

Ala Thr Ile Pro Leu Glu Ala Ser Leu His Gly Lys Glu Ala Phe Leu
165 170 175

Pro Thr Val Tyr Asn Val Val Lys Asp Glu Glu Tyr Arg Gly Glu Ile
180 185 190

Lys Val Gly Leu Thr Phe Thr Pro Glu Val
195 200

<210> 35
<211> 544
<212> DNA
<213> Zea mays

<220>
<221> unsure
<222> (415)

<220>
<221> unsure
<222> (478)

<220>
<221> unsure
<222> (494)

<220>
<221> unsure
<222> (509)

<220>
<221> unsure
<222> (515)

<220>
<221> unsure
<222> (531)..(532)

<220>
<221> unsure
<222> (542)

<400> 35
gttcgttcac gccacaggca aggcacaggg gcttgtgagg gagagcgagg agcggaggag 60
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gattacctct gtaacatgga tccgtatgca attctcaagt gccgttcaca ggagcagaag 180
agcagtattg caactggaaa aggaactacc cctgagtgga atgaaaactt tatcttcact 240
gtgtctgacc ggacaacaga cttggtaatc aagcttatgg acagtgatac aggcacagca 300
gatgactttg ttggtgaagc aacgattcca ttggaagcag tgtatactga aaggagcatt 360
ccaccaacac tctataatgt tgtgaaaggt gaaaaatact gcggggaaat caaantggtc 420
tcacattcac tcctgaggat actcgcaagc gggtctccaa aggacttcgt ggtggaanca 480
tcatcttaag ctantcttta gggtcacana cacancacaa tcatcgcttg nncctcaccg 540
tnat 544

<210> 36
<211> 130
<212> PRT
<213> Zea mays

<220>
<221> UNSURE
<222> (118)

<400> 36
Met Val His Gly Thr Leu Glu Val Leu Leu Val Gly Ala Lys Gly Leu
1 5 10 15

Glu Asn Thr Asp Tyr Leu Cys Asn Met Asp Pro Tyr Ala Ile Leu Lys
20 25 30

Cys Arg Ser Gln Glu Gln Lys Ser Ser Ile Ala Thr Gly Lys Gly Thr
35 40 45

Thr Pro Glu Trp Asn Glu Asn Phe Ile Phe Thr Val Ser Asp Arg Thr
50 55 60

Thr Asp Leu Val Ile Lys Leu Met Asp Ser Asp Thr Gly Thr Ala Asp
65 70 75 80

Asp Phe Val Gly Glu Ala Thr Ile Pro Leu Glu Ala Val Tyr Thr Glu
85 90 95

Arg Ser Ile Pro Pro Thr Leu Tyr Asn Val Val Lys Gly Glu Lys Tyr
100 105 110

Cys Gly Glu Ile Lys Xaa Gly Leu Thr Phe Thr Pro Glu Asp Thr Arg
115 120 125

Lys Arg
130

<210> 37
<211> 459
<212> DNA
<213> Triticum aestivum

<220>
<221> unsure
<222> (435)

<400> 37
gccgagcttt ccatttttca actcctagtc ctatacatac agcggaaccc cggggctcgg 60
atcggatcta cagcaattag tctcgacctt cagtcgtgcc gcctgctcat cagcatataa 120
ttcctgatcg agcgagcggg agaggaaggc gagatcaggc cgggagagaa gatggcgcag 180
gggacgctgg aggtgctgct cgtgggagcc aagggcctcg agaacaccga ctacctctgc 240
aacatggacc cgtacgcggt tctaaaatgc acctcgcagg agcaaaagag caccgtcgcc 300
tctggaaagg gaagtgatcc tgagtggaac gaaacctttg tgttcaccgt ctctgagaat 360
gcaactgagc ttgtcatcaa gctactggac agtgatggtg gcacggacga cgacagcgtt 420
ggtgaagcaa cgatncattg gatggagtgt acactgaag 459

<210> 38
<211> 87
<212> PRT
<213> Triticum aestivum

<400> 38
Met Ala Gln Gly Thr Leu Glu Val Leu Leu Val Gly Ala Lys Gly Leu
1 5 10 15

Glu Asn Thr Asp Tyr Leu Cys Asn Met Asp Pro Tyr Ala Val Leu Lys
20 25 30

Cys Thr Ser Gln Glu Gln Lys Ser Thr Val Ala Ser Gly Lys Gly Ser
35 40 45

Asp Pro Glu Trp Asn Glu Thr Phe Val Phe Thr Val Ser Glu Asn Ala
50 55 60

Thr Glu Leu Val Ile Lys Leu Leu Asp Ser Asp Gly Gly Thr Asp Asp
65 70 75 80

Asp Ser Val Gly Glu Ala Thr
85

<210> 39
<211> 417
<212> DNA
<213> Oryza sativa

<400> 39
atcgtcaact cagctcctct ctttcttccc ctccccgct cctccgcgag acgacccgcg 60
cccgtagcca tccatgtcga tacaaggcca gatcctcgaa gtcagagtca ctgggtgcag 120
gaagctgagg gacacggagt tcttcacgcg gcaggatccc tacgtctgca tcgagtatgc 180
caccaacaag ttccgcaccc gcacctgcac cgatggggga aggaacccta cttttgacga 240
gaagtttcat atacctctca ttgaggggct tcgtgagcta accgtcacag tgtggaacag 300

caacacgctc acccatgatg atttcattgg caatggcagg gtgcaagctg cataaggtgc 360
ttacgcgtgg ctatgatgat gcctcaaggg ccctccagac acgccatatg aggtctg 417

<210> 40
<211> 83
<212> PRT
<213> Oryza sativa

<400> 40
Leu Glu Val Arg Val Thr Gly Cys Arg Lys Leu Arg Asp Thr Glu Phe
1 5 10 15

Phe Thr Arg Gln Asp Pro Tyr Val Cys Ile Glu Tyr Ala Thr Asn Lys
20 25 30

Phe Arg Thr Arg Thr Cys Thr Asp Gly Gly Arg Asn Pro Thr Phe Asp
35 40 45

Glu Lys Phe His Ile Pro Leu Ile Glu Gly Leu Arg Glu Leu Thr Val
50 55 60

Thr Val Trp Asn Ser Asn Thr Leu Thr His Asp Asp Phe Ile Gly Asn
65 70 75 80

Gly Arg Val

<210> 41
<211> 550
<212> DNA
<213> Glycine max

<220>
<221> unsure
<222> (534)

<400> 41
ggtgaattgc aatttcaatt aattagaatt caacgtttgc aaattgcata ttgttcttct 60
cttcctctct tcctctgact ccatgtcgtc gataacgggc atccagggcc aacctcttga 120
ggttacggtg gtttcgtgct ccaagttgaa ggacacagaa tggatttcaa ggcaagatcc 180
gtacgtttgt gttgagtatg gcagcacaaa gttccgaacc agaacctgca cagacggcgg 240
aaaaaatccg gtattccaag agaagttcat cttccccctc attgaaggcc ttcgggagct 300
caatgtcctt gtttggaaca gcaatactct caccttggac gattttatag gaagcggaaa 360
gattcaattg cacaaggttc tctctcaagg cttcgatgac tctgcttggc cacttcagac 420
caaaactggc agatacgctg gtgaagtcaa agtcatattg cattacgcaa ttgcaaatca 480
tcaaaggcat aaatcagtgt caagccatgc tccatcaaca cctccgtatg tggnaacaac 540
aactcctccc 550

<210> 43
<211> 424
<212> DNA
<213> Zea mays

<220>
<221> unsure
<222> (169)..(170)

<220>
<221> unsure
<222> (172)..(173)

<220>
<221> unsure
<222> (178)..(179)..(180)

<220>
<221> unsure
<222> (183)

<400> 43
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cgccacctgg aggagaggac agcgcgccag ggaggggggag gaggaagaag aacatgggga 120
agggcgtcct gaaggtgcac ctcgtcgacg ccaaggggct ctccggcann gnnttctnnn 180
ggnagctgga ccctacgtg atcatgcagt accggagcca ggagcgcaag agcagcgtcg 240
cccgagacca aggaaggaac ccgtgctgga acgaggtgtt caagttccag atcaactcgg 300
ccgcggccaa cgtgcagcac aagctcatcc tccggatcat ggaccacgac aacttctcca 360
gcgacgactt ctcggcgagg cgacgatcga cgtgacggac atcgtcagcc tgggcgccga 420
gcgc 424

<210> 44
<211> 85
<212> PRT
<213> Zea mays

<220>
<221> UNSURE
<222> (18)..(19)

<220>
<221> UNSURE
<222> (21)..(22)..(23)

<400> 44
Gly Lys Gly Val Leu Lys Val His Leu Val Asp Ala Lys Gly Leu Ser
1 5 10 15

Gly Xaa Xaa Phe Xaa Xaa Xaa Leu Asp Pro Tyr Val Ile Met Gln Tyr
20 25 30

Arg Ser Gln Glu Arg Lys Ser Ser Val Ala Arg Asp Gln Gly Arg Asn
35 40 45

Pro Cys Trp Asn Glu Val Phe Lys Phe Gln Ile Asn Ser Ala Ala Ala
50 55 60

Asn Val Gln His Lys Leu Ile Leu Arg Ile Met Asp His Asp Asn Phe
65 70 75 80

Ser Ser Asp Asp Phe
85

<210> 45
<211> 548
<212> DNA
<213> Glycine max

<220>
<221> unsure
<222> (291)

<220>
<221> unsure
<222> (349)

<220>
<221> unsure
<222> (417)

<220>
<221> unsure
<222> (437)

<220>
<221> unsure
<222> (446)

<220>
<221> unsure
<222> (486)

<220>
<221> unsure
<222> (492)

<220>
<221> unsure
<222> (506)

<220>
<221> unsure
<222> (525)

<220>
<221> unsure
<222> (528)

<220>
<221> unsure
<222> (544)

<400> 45
ttaaattgta agaattttgc tgacttgtaa gcttcagaga cgaagacaca cggttagagt 60
gagaaagaga tggcaattgg gttcatggag gtgcagcttg tgaaagcaaa ggagttgtgt 120
gacactgatt tctttggtag tatggacccg tatgttgtga tacaatacaa cggccaagag 180
caaaggagta gtgttgctaa gggacagggc aataatccgg tatggaatga gaaatttgtg 240
ttcaaggtag aatatcctac actgagtaat tcatacaaga ttatcttaaa natcatggac 300
aaggatcttt tatctgcaga tgactttgtt ggtcaagcca tagtcctang tgggaagatt 360
tattagccat aaggggtaga ggatggtgcc ggctgagcta caacctccta aagtacnaga 420
gtaattccgt gcagatnaat ccttantggt ggagaaattg atcttgggat aacttttaaa 480
gggggnaaga angagttcaa tggagnaagc ctaaaccaag gatcnaangg acagtaaatt 540
agtntttc 548

<210> 46
<211> 89
<212> PRT
<213> Glycine max

<220>
<221> UNSURE
<222> (71)

<400> 46
Gly Phe Met Glu Val Gln Leu Val Lys Ala Lys Glu Leu Cys Asp Thr
1 5 10 15

Asp Phe Phe Gly Ser Met Asp Pro Tyr Val Val Ile Gln Tyr Asn Gly
20 25 30

Gln Glu Gln Arg Ser Ser Val Ala Lys Gly Gln Gly Asn Asn Pro Val
35 40 45

Trp Asn Glu Lys Phe Val Phe Lys Val Glu Tyr Pro Thr Leu Ser Asn
50 55 60

Ser Tyr Lys Ile Ile Leu Xaa Ile Met Asp Lys Asp Leu Leu Ser Ala
65 70 75 80

Asp Asp Phe Val Gly Gln Ala Ile Val
85

<210> 47
<211> 473
<212> DNA
<213> Triticum aestivum

<220>
<221> unsure
<222> (296)

<220>
<221> unsure
<222> (473)

<400> 47
tccaaacgcg acctcatcag agcaagaccc ggaggaaaca aggagaggcc agagcggcct 60
gtcacaaggc aaggacagag gaggtgcttg ttcaggtctc ctgctagatc cggaggcgat 120
gggcaggggc tgctggaggt gcatctcgtc gacgccaagg gcctcttcgg cagcgatttc 180
ctaggaagat cgacccgtat gtaatcgtgc aataccggag ccaggagcgc aagagcagca 240
ctccagagat gaggggagga acccgagctg gaacgaggtg ttccggttcc agatcnctcc 300
tctgcggcca acgggcagca caagctcttc ctccggatca tggaccacga catcttctcc 360
agcgacgact tcctcggcca agcgacgatc aacgtgaccg atctgatcag accggcatgg 420
agaagcgggc gcgtcgcagc tgaacgcggc aaagtacaac gttgttgtcc gcn 473

<210> 48
<211> 99
<212> PRT
<213> Triticum aestivum

<220>
<221> UNSURE
<222> (24)

<220>
<221> UNSURE
<222> (47)

<220>
<221> UNSURE
<222> (62)

<400> 48
Gly Gln Gly Leu Leu Glu Val His Leu Val Asp Ala Lys Gly Leu Phe
1 5 10 15

Gly Ser Asp Phe Leu Gly Arg Xaa Asp Pro Tyr Val Ile Val Gln Tyr
20 25 30

Arg Ser Gln Glu Arg Lys Ser Ser Thr Pro Glu Met Arg Gly Xaa Gly
35 40 45

Glu Glu Pro Glu Leu Glu Arg Gly Val Pro Val Pro Asp Xaa Ser Ser
50 55 60

Ala Ala Asn Gly Gln His Lys Leu Phe Leu Arg Ile Met Asp His Asp
65 70 75 80

Ile Phe Ser Ser Asp Asp Phe Leu Gly Gln Ala Thr Ile Asn Val Thr
85 90 95

Asp Leu Ile

<210> 49
<211> 465
<212> DNA
<213> Oryza sativa

<400> 49
aaagatcacc caaaacccta tattccatag ttgagacaca agatttttg aagccaagtt 60
tgcgcattac atcaaagggt tcttttgatg cgaccaatgc tgtgaagagt gtaactagca 120
gtatctctag cgcttcaggg aagcatgtcg ctgacgatac aagagaattt gttggagagc 180
tgaacattac agtggtaaga ggtattcaag ttggccgtca gagacatgct aacgagcgat 240
ccatatgttg ttctaacact tggggagcag aaagctcaaa ccactgttaa accgagtgac 300
ttgaacccag tatggaatga ggtgcttaag atatcaattc ctcgaaatta tggacctctt 360
aaacttgaag tatacgacca tgatacgttc tctgctgatg atatcatggg ggaagcggag 420
atagatcttc aaccaatgat cacagccgtc atggcctttg gagaa 465

<210> 50
<211> 31
<212> PRT
<213> Oryza sativa

<400> 50
Val Val Leu Thr Leu Gly Glu Gln Lys Ala Gln Thr Thr Val Lys Pro
1 5 10 15

Ser Asp Leu Asn Pro Val Trp Asn Glu Val Leu Lys Ile Ser Ile
20 25 30

<210> 51
<211> 390
<212> DNA
<213> Oryza sativa

<220>
<221> unsure
<222> (43)

<220>
<221> unsure
<222> (204)

<220>
<221> unsure
<222> (301)

<220>
<221> unsure
<222> (347)

<220>
<221> unsure
<222> (373)

<400> 51
gcctgtgcaa catcatcatc aagaagaaga agagatcaac ggnaagaaga ctagcgacta 60
gcgagagatc gatcgaagag aagaggagag atggtgcacg ggaagctgga ggtcctcctc 120
gtctgcgcca agggcctcga ggacactgac ttcttgaacg acatggaccc ctacgtgatc 180
ctcacctgcc gcactcagga gcangaaaag cagcgttgca aaaggagcag gaagcgagcc 240
tgaatggaac gagaccttcg tcttcaccgt ctccgacgat gttccacagc tcaatgtcaa 300
ngatcatgga caagtgatgg ccttctcaag ctgacgattt cggtccnggt gaagcaaaca 360
attcctctgg gangcctgtg ttcctgggaa 390

<210> 52
<211> 69
<212> PRT
<213> Oryza sativa

<400> 52
Met Val His Gly Lys Leu Glu Val Leu Leu Val Cys Ala Lys Gly Leu
1 5 10 15

Glu Asp Thr Asp Phe Leu Asn Asp Met Asp Pro Tyr Val Ile Leu Thr
20 25 30

Cys Arg Thr Gln Glu Gln Lys Ser Ser Val Ala Lys Gly Ala Gly Ser
35 40 45

Glu Pro Glu Trp Asn Glu Thr Phe Val Phe Thr Val Ser Asp Asp Val
50 55 60

Pro Gln Leu Asn Val
65

<210> 53
<211> 489
<212> DNA
<213> Glycine max

<220>
<221> unsure
<222> (417)

<220>
<221> unsure
<222> (428)

<220>
<221> unsure
<222> (452)

<220>
<221> unsure
<222> (482)

<400> 53
agaaagaaaa aagtggatcc agccaaattc cagctccaat ttgtaactca ctgcttcagg 60
catttctggc acaatttttt ccacctttat ttcaacttta agactccaca gaaagaagca 120
tattcctgag tcaaatagtt ctgtccatat agaatttgtg aagtgagagt ccaacctttc 180
attttcaatt ttcaaagatg cctcgtggaa cacttgaagt tgttctgatc agcgccaaag 240
gaatcgatga caatgatttt ctctccagca tagatcctta tgtgattctc acatacaggg 300
cacaggagaa aaagagcact gtgcaagaaa gatgctggat ccaagccaca atggaatgag 360
agctttcttt tcactgtctc tgacagtgct tctgaactta atctgaagat aatgggntaa 420
agacaacntt agtcaaagat ggttggcctg gngagggaac caatcaatta gattcaagtg 480
gnttggagg 489

<210> 54
<211> 42
<212> PRT
<213> Glycine max

<400> 54
Met Pro Arg Gly Thr Leu Glu Val Val Leu Ile Ser Ala Lys Gly Ile
1 5 10 15

Asp Asp Asn Asp Phe Leu Ser Ser Ile Asp Pro Tyr Val Ile Leu Thr
20 25 30

Tyr Arg Ala Gln Glu Lys Lys Ser Thr Val
35 40

<210> 55
<211> 523
<212> DNA
<213> Triticum aestivum

<220>
<221> unsure
<222> (401)

<220>
<221> unsure
<222> (407)

<220>
<221> unsure
<222> (449)

<220>
<221> unsure
<222> (456)..(457)

<220>
<221> unsure
<222> (493)